

AMENDMENTS TO THE CLAIMS

Applicant amends claims 16, 24, and 27; and cancels claims 17-21, 23, 30-34. Accordingly, claims 16, 22, 24, 27, 28, 35, 36 and 38 remain pending upon entry of this amendment. A listing of claims is provided for the convenience of the examiner.

Listing of Claims

1-15 (Canceled)

16. (Currently amended) A process for stabilizing or preserving a biomolecule comprising the steps of:

(a) providing a biomolecule immobilized on a surface; and

(b) covering the surface with a composition comprising:

i. at least one non-reducing disaccharide selected from the group consisting of trehalose (D-glucopyranosyl-D-glucopyranoside), sucrose (β -D-fructofuranosyl- α -D-glucopyranoside), and a derivative thereof; and

ii. at least one protein or polypeptide of the LEA class comprising a motif comprising 11 amino acids, wherein the motif is selected from the group consisting of:

(a) K-T-A-E-F-R-D-S-A-G-E (SEQ ID NO. 2),

(b) K-G-Q-E-F-K-E-R-A-G-E (SEQ ID NO. 3),

(c) K-A-E-E-T-K-Q-R-A-G-E (SEQ ID NO. 4),

(d) K-M-D-E-T-K-Q-R-A-G-E (SEQ ID NO. 5),

(e) K-A-R-K-T-K-D-S-A-A-E (SEQ ID NO. 6),

(f) K-A-K-E-Y-K-D-Y-T-A-E (SEQ ID NO. 7),

(g) K-A-R-E-T-T-E-K-A-R-E (SEQ ID NO. 8), and

(h) T-K-D-S-A-A-E-K-A-R-E (SEQ ID NO. 9).

17-21 (Canceled)

22. (Previously presented) A process according to claim 16, wherein said non-reducing disaccharide is present at from 0.01 to 15 weight percent in relation to a ready-to-use solution and said protein or polypeptide of the LEA class is present at from 0.00001 to 1 weight percent in relation to the ready-to-use solution.

23. (Canceled)

24. (Currently amended) A process for the production of a surface with an immobilized and stabilized or preserved biomolecule, comprising the steps of:

(a) providing a surface with a biomolecule immobilized thereon; and

(b) covering the biomolecule with a composition comprising:

i. at least one non-reducing disaccharide selected from the group consisting of trehalose (D-glucopyranosyl-D-glucopyranoside), sucrose (β -D-fructofuranosyl- α -D-glucopyranoside), and a derivative thereof; and

ii. at least one protein or polypeptide of the LEA class comprising a motif comprising 11 amino acids, wherein the motif is selected from the group consisting of:

(a) K-T-A-E-F-R-D-S-A-G-E (SEQ ID NO. 2),

(b) K-G-Q-E-F-K-E-R-A-G-E (SEQ ID NO. 3),

(c) K-A-E-E-T-K-Q-R-A-G-E (SEQ ID NO. 4),

(d) K-M-D-E-T-K-Q-R-A-G-E (SEQ ID NO. 5),

(e) K-A-R-K-T-K-D-S-A-A-E (SEQ ID NO. 6),

(f) K-A-K-E-Y-K-D-Y-T-A-E (SEQ ID NO. 7),

(g) K-A-R-E-T-T-E-K-A-R-E (SEQ ID NO. 8), and

(h) T-K-D-S-A-A-E-K-A-R-E (SEQ ID NO. 9).

25. (Canceled)

26. (Canceled)

27. (Currently amended) A surface of a material selected from the group consisting of glass, quartz glass, quartz, silicon, polymers, nitrocellulose, nylon and micro fiber membranes, and paper, wherein the surface includes a biomolecule immobilized thereon, covered with a stabilizing or preserving composition comprising:

at least one non-reducing disaccharide selected from the group consisting of trehalose (D-glucopyranosyl-D-glucopyranoside), sucrose (β -D-fructofuranosyl- α -D-glucopyranoside), and a derivative thereof; and

at least one protein or polypeptide of the LEA class comprising a motif comprising 11 amino acids, wherein the motif is selected from the group consisting of:

- (a) K-T-A-E-F-R-D-S-A-G-E (SEQ ID NO. 2),
- (b) K-G-Q-E-F-K-E-R-A-G-E (SEQ ID NO. 3),
- (c) K-A-E-E-T-K-Q-R-A-G-E (SEQ ID NO. 4),
- (d) K-M-D-E-T-K-Q-R-A-G-E (SEQ ID NO. 5),
- (e) K-A-R-K-T-K-D-S-A-A-E (SEQ ID NO. 6),
- (f) K-A-K-E-Y-K-D-Y-T-A-E (SEQ ID NO. 7),
- (g) K-A-R-E-T-T-E-K-A-R-E (SEQ ID NO. 8), and
- (h) T-K-D-S-A-A-E-K-A-R-E (SEQ ID NO. 9).

28. (Previously presented) A surface according to claim 27, wherein said non-reducing disaccharide is present at from 0.01 to 15 weight percent in relation to a ready-to-use solution and said protein or polypeptide of the LEA class is present at from 0.00001 to 1 weight percent in relation to the ready-to-use solution.

29 - 34. (Canceled)

35. (Previously presented) An analytical and/or diagnostic device, comprising a surface as defined in claim 27.

36. (Previously presented) A device according to claim 35 selected from the group consisting of biochips, sensor chips, microtiter plates, test tubes and culture dishes.

37. (Canceled)

38. (Previously presented) A method of analysis and/or diagnosis, comprising the steps of:

- (a) providing a surface according to claim 27; and
- (b) incubating the surface with a sample to obtain an analytical and/or diagnostic result.